

Technical Attachment

**NWS Southern Region ROC Operations During a Significant Weather Event**

Mark Fox, WFO Amarillo and Matthew Zika, WFO Memphis

What happens at Southern Region Headquarters during a significant weather event? On the night of April 16, 2002, we were able to experience it first hand, as Regional Operations Center (ROC) duty officers. Several tornadoes touched down in the Dallas/Fort Worth Metroplex; one of which caused F3 damage in Fort Worth. In a span of two days, which happened to coincide with the overlap period during which the first author was being replaced by the second as the ROC officer, we were both given a much different perspective of significant weather, this time, from the regional point of view.

As ROC duty officers, our role during this event was one of support: gathering as much information as possible and making ourselves available to the affected field offices (WFOs and RFCs). In this case, the affected WFO was in the region's backyard, but the duties we describe are not unique to this case. The data gathering, decision-making, and anticipation of future events occur in nearly all significant weather events supported by Regional Headquarters.

Discussion over the possibility of severe thunderstorms dominated the morning map briefing on April 16. Abundant moisture, instability, and lift were forecast over much of North Texas, but a large capping inversion was noted on the morning Fort Worth sounding. It was agreed any thunderstorms capable of breaking the cap would quickly become severe. By the end of the ROC duty officer's day, around 3:00 p.m. (on Tuesdays, the day begins at 6:00 a.m.), no thunderstorms had developed, but skies were clearing and the dry line was bulging into north central Texas. Just after 3:00 p.m., we departed the ROC but kept a watchful eye on any developing weather during the remainder of the afternoon and evening from our temporary quarters.

The quiet weather did not last long, as several supercell thunderstorms exploded along the dry line west of the Dallas/Fort Worth metroplex around 4:00 p.m. By 5:00 p.m., WFO Fort Worth issued their first severe thunderstorm and tornado warnings for counties just west of Fort Worth. We talked on the phone with each other as soon as the warnings went out, making jokes about chasing the storms in the metroplex rush hour traffic. By 5:30 p.m., we decided to go back to the ROC to gather information, since this event was already gathering a massive amount of media attention. The only problem was getting to the ROC, since a large supercell was over downtown Fort Worth and was responsible for the latest tornado warning. This supercell produced the F3 tornado, which touched down at 5:45 p.m. in southeast Fort Worth. Once the core of the storm and the tornado moved east of downtown, we each made our way to the ROC. Just before 6:00 p.m., we received word there was indeed tornado damage in Fort Worth. It was obvious that the ROC was going to be very active the remainder of the night.

We were joined at the ROC by Bill Proenza, Director of SRH; Steven Cooper, Chief of Climate Water and Weather Division; Mike Coyne, SRH Performance and Evaluations Meteorologist; and Walt Zaleski, SRH Warning and Coordination Meteorologist. As a team, we gathered as much information as possible and began to anticipate public perception of the event. Since a significant

tornado occurred in a major media market, we were anticipating extensive media attention, especially since the area was only in a slight risk of severe weather.

WFO Fort Worth (FWD) did an exceptional job handling the severe weather episode. The forecasters at FWD issued eight tornado warnings, with an average lead time of 16 minutes. Our job was to compile information about the products issued from the WFO. As a team, we gathered every warning, statement, and local storm report issued; all public products including discussions, hazardous weather outlooks, and forecasts; and all products issued by the Storm Prediction Center. The remainder of the night was focused on the extensive media coverage and the needs of the State of Texas Division of Emergency Management. The thunderstorms continued until 10:00 p.m., with the last tornado occurring south of Dallas around 9:00 p.m. As the event wound down, we had enough information to highlight the exceptional job WFO Fort Worth did prior to and during the event.

In the next mornings' newspaper, a headline read "Even Forecasters Were Taken by Surprise." The tone of the article made it look as if the Weather Service did not do a good job. Since our team had gathered the information the night before, the newspaper's negative comments were quickly addressed by Ron Trumbla, NOAA Public Affairs Officer and others at Regional Headquarters. SRH was able to point out to the media how well the Fort Worth office performed and was able to cite specific examples from the products they issued. The Regional Director had this information at his disposal and conducted numerous media interviews praising the work done by the staff at WFO FWD.

The role of the ROC duty officer, as well as the Regional Headquarters, during severe weather is support. When severe weather, or any other significant weather occurs, call the ROC and let the duty officer know how SRH can assist your office. The duty officer is able to help and likely has already gathered information about your event. In this case, SRH was able to gather information from specific products while the event was ongoing. With this information in hand, SRH can share this information with your WFO, National Headquarters, and the media. Once the event in Fort Worth was over, we had plenty of time to talk with SRH personnel, who told us the actions we took were not unique. Each time a significant event occurs in Southern Region, the SRH team, including the ROC duty officer, works hard to gather information.

Our experience in the ROC gave us insight into the support role SRH provides. Before this event, we were somewhat unaware of the daily high level of activity at SRH. As ROC duty officers, we learned how the staff at Regional Headquarters anticipates significant weather events and what steps they take to support local offices. What we learned at SRH can also be applied at local offices. As forecasters, we have been trained to anticipate future weather events and act accordingly. This same attitude applied to us as ROC duty officers. During the event, we worked with SRH staff members to anticipate not only the weather, but what might happen because of the weather.